

Hello!  
Let's  
dine



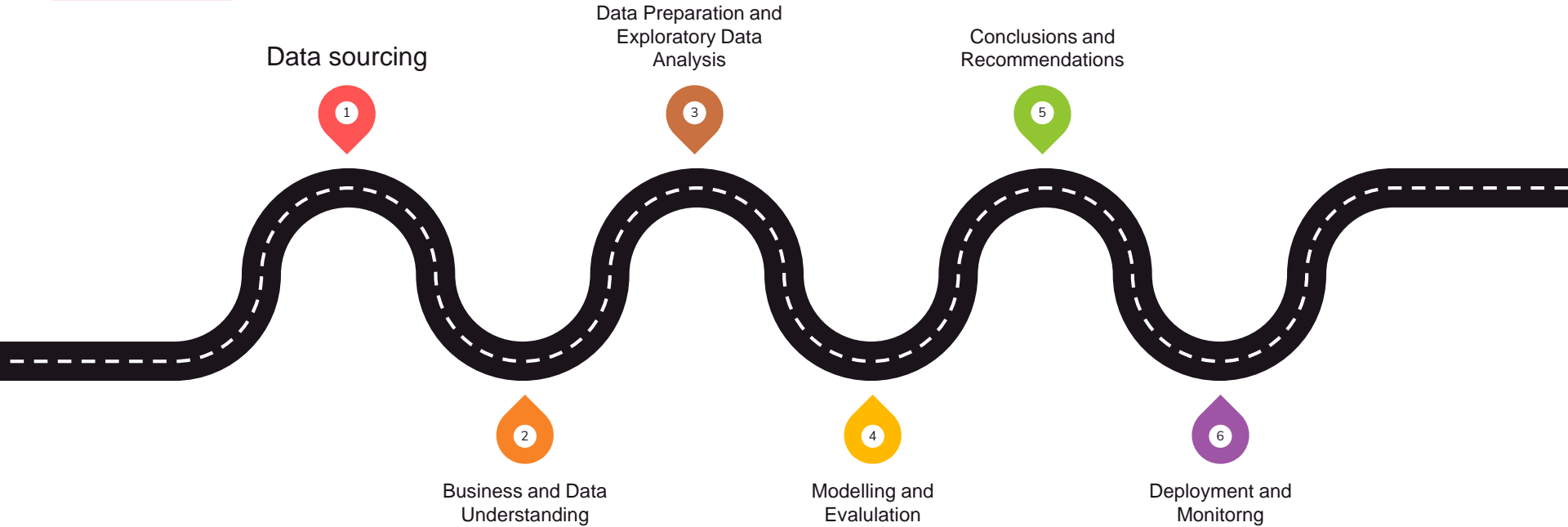


# GOURMENT GUROS





# Roadmap





# BUSINESS UNDERSTANDING

- The U.S. dining industry is diverse, yet finding restaurants that match specific preferences can be challenging due to a lack of centralized recommendation platform
- Our solution offers tailored dining suggestions, enhancing the user experience and supporting local businesses.



“

"In a world full of choices, the art of discovery lies in finding the perfect match. Gourment Guros is here to turn the overwhelming into the delightful."



# PROBLEM STATEMENT

- Users struggle with generalized recommendations
- There is a lack of real-time, location-specific suggestions.



# MAIN OBJECTIVE:

- To develop an intelligent system providing personalized recommendations based on user preferences and location



# DATA UNDERSTANDING

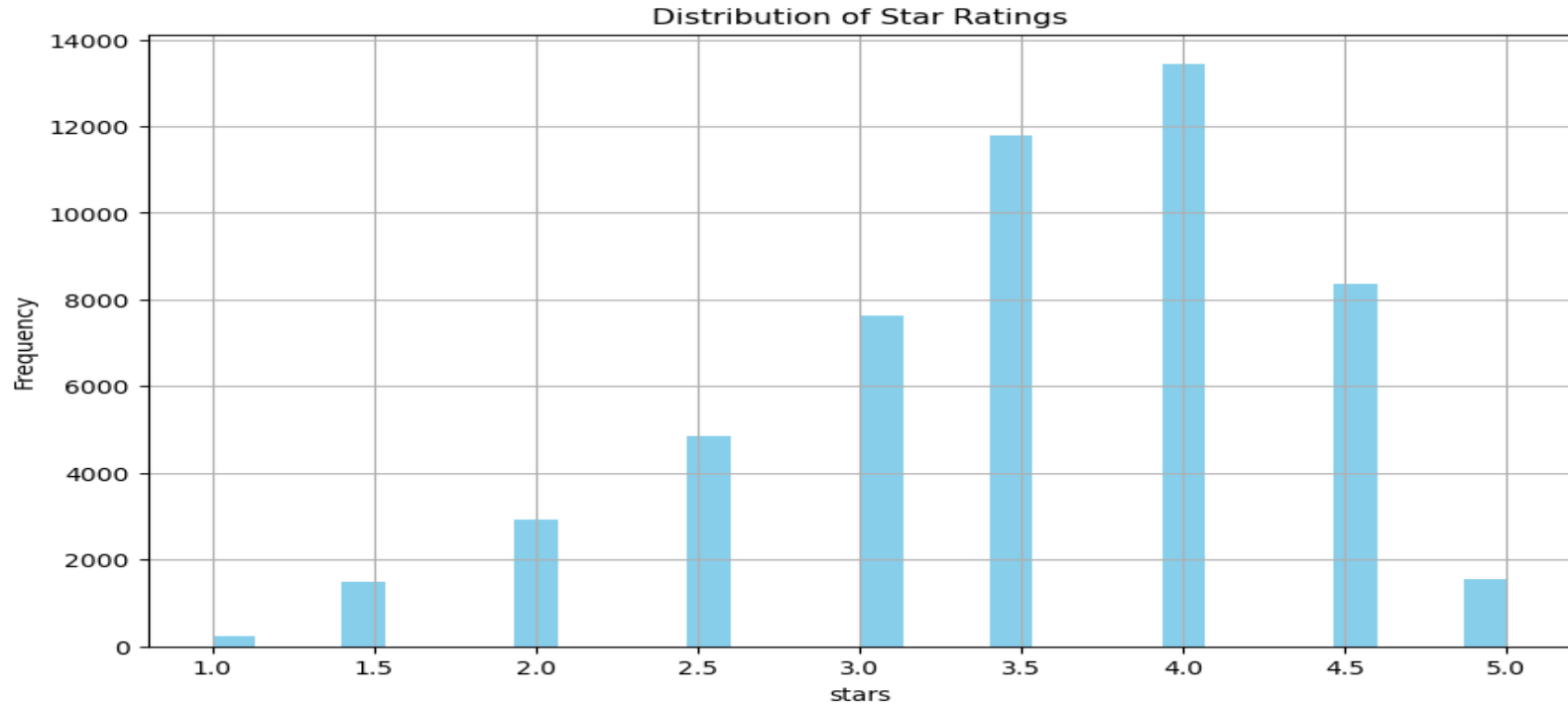
- **Data Source:** Yelp database for business and user review data.
  - I. **Restaurant Data:** 52,286 restaurants, 14 columns.
  - II. **Review Data:** 2.55M reviews, 4 columns.



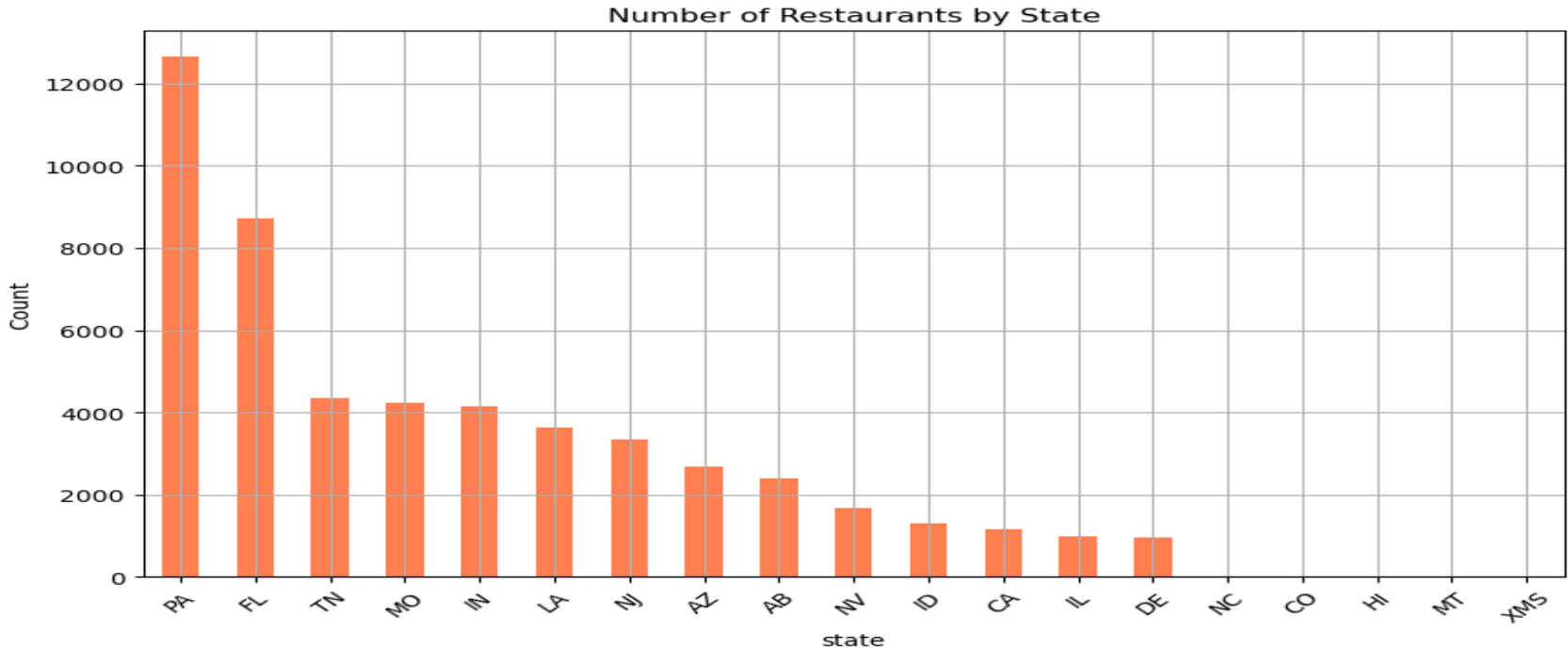




# OBSERVATIONS AND FINDINGS

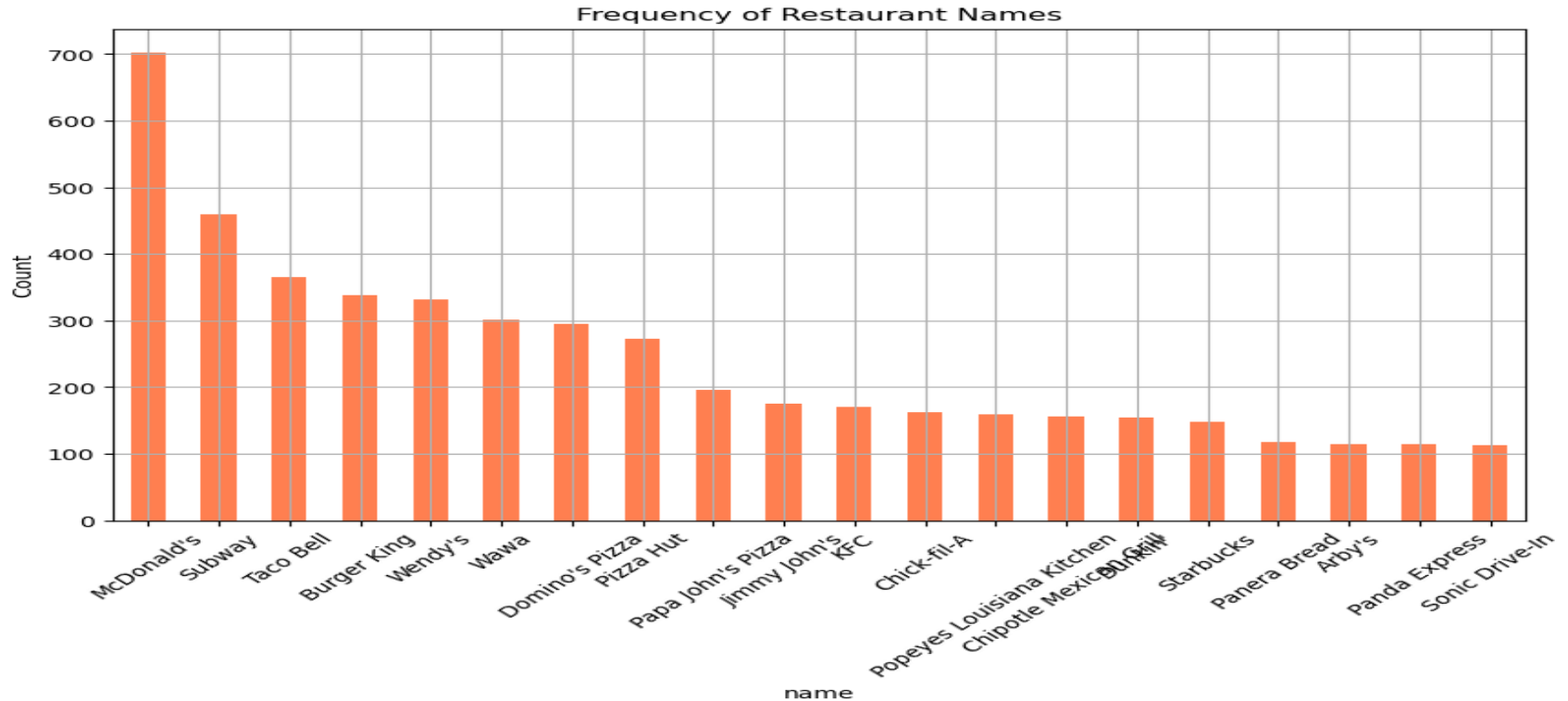


- Most common ratings are 4.0 and 3.5 stars, indicating general satisfaction.
- Ratings below 2.5 stars are uncommon, showing few very poor experiences



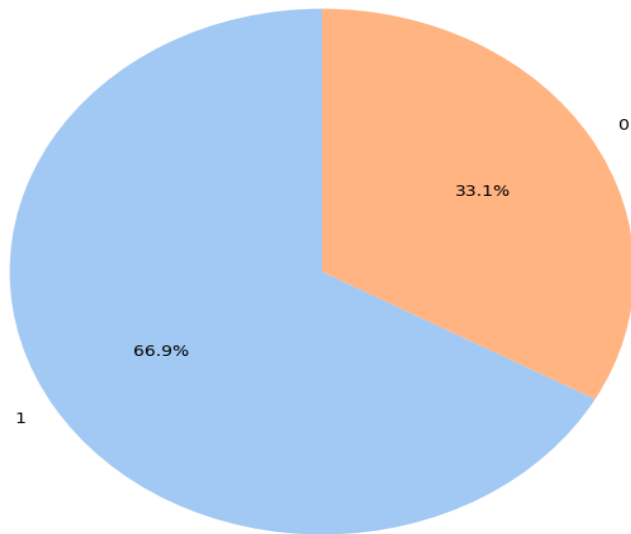
- PA, FL, and TN have the most restaurants, making them major markets.
- NC, CO, HI, and MT have fewer restaurants, indicating lower market saturation.



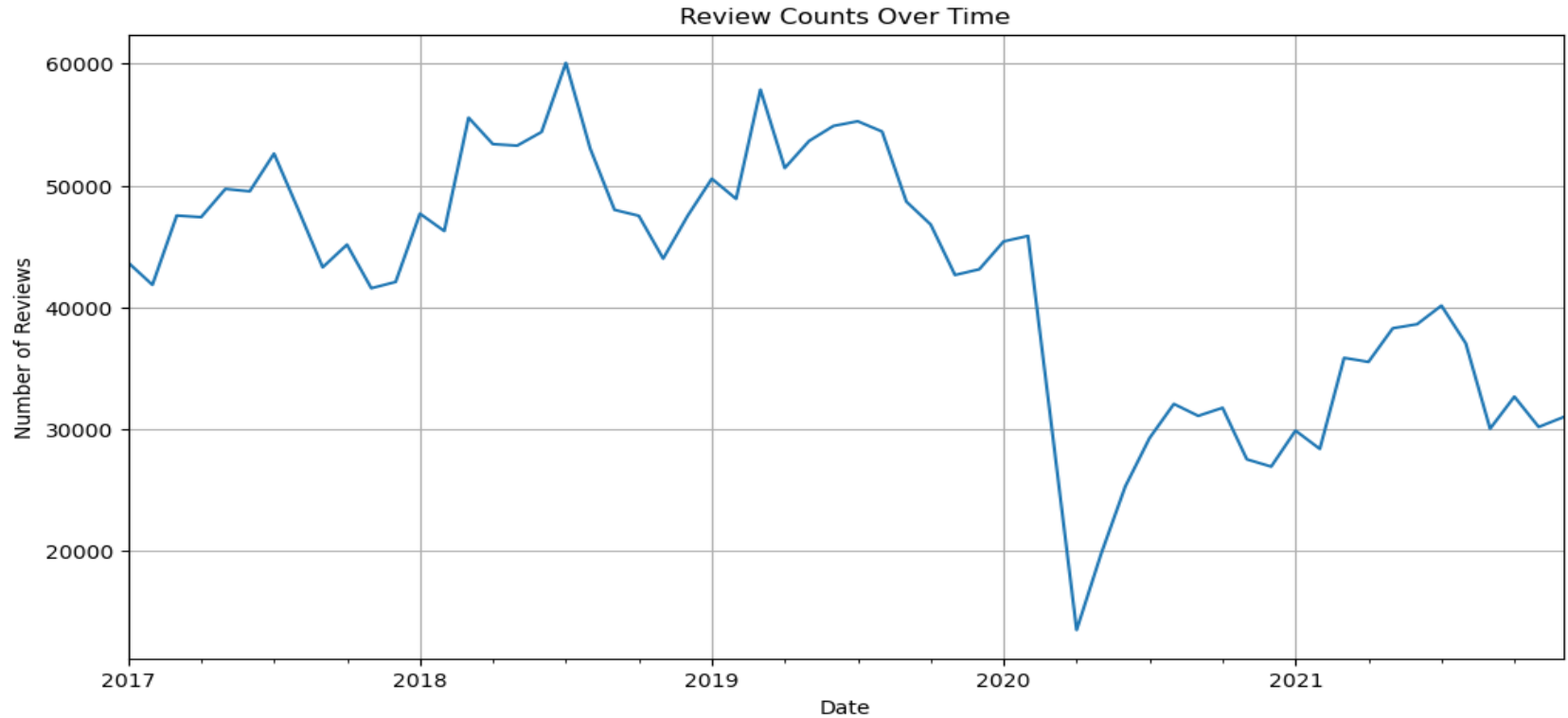


- McDonald's, Subway, and Taco Bell are the most frequent, indicating strong fast-food presence.
- Wendy's, Domino's, and Pizza Hut show high popularity, ideal for familiar recommendations.

Proportion of Open vs Closed Restaurants



- 66.9% Open Restaurants:** The majority are operational, offering ample options for recommendations.
- 33.1% Closed Restaurants:** A notable portion is inactive, highlighting the need to filter out closed establishments for accurate recommendations and better user experience.



- Review counts peak mid year, indicating increased customer engagement during this period.
- Noticeable drops in reviews occur after July, particularly in September and December.



# MODELING APPROACH

## Content-Based Filtering

- Utilizes restaurant features and attributes.
- Implements cosine similarity and TfidfVectorization.

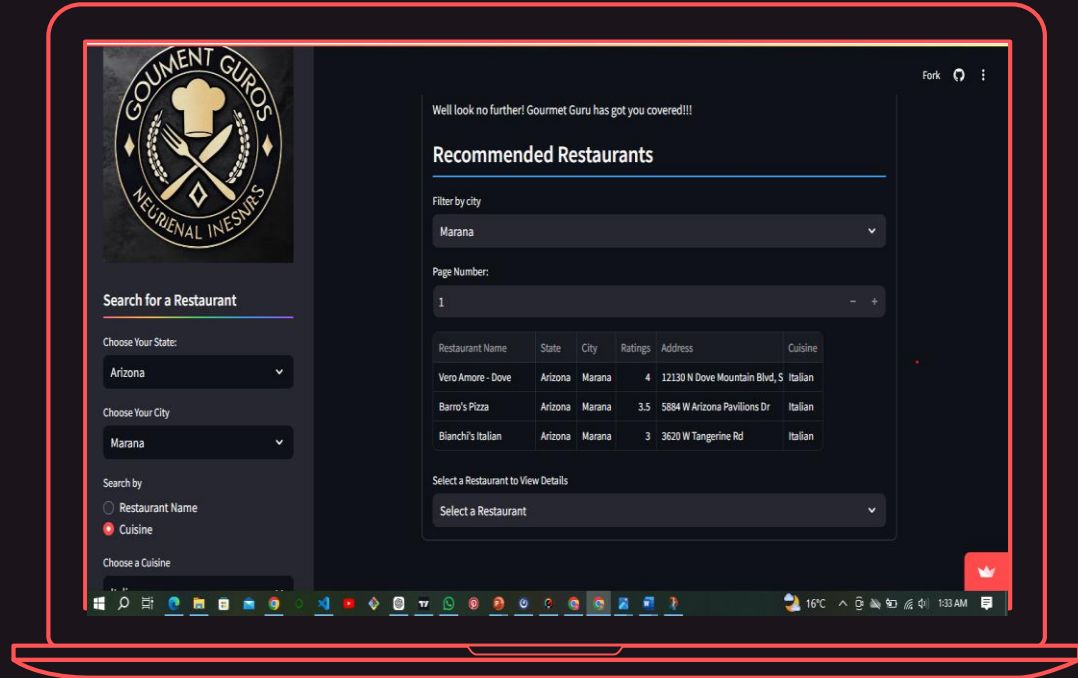
## Collaborative Filtering

- Uses user ratings with Surprise library.
- Models: NormalPredictor, NMF, SVD, and tuned SVD.



## WEB APPLICATION

- Provides real-time, location-specific restaurant recommendations.
- User-friendly interface for easy interaction.
- Enhances dining experience with tailored suggestions.



# RECOMMENDATIONS

- Prioritize Major Markets for Data
- Tailor Recommendations to Market Size
- Incorporate Seasonality into Recommendations
- Cuisine diversification



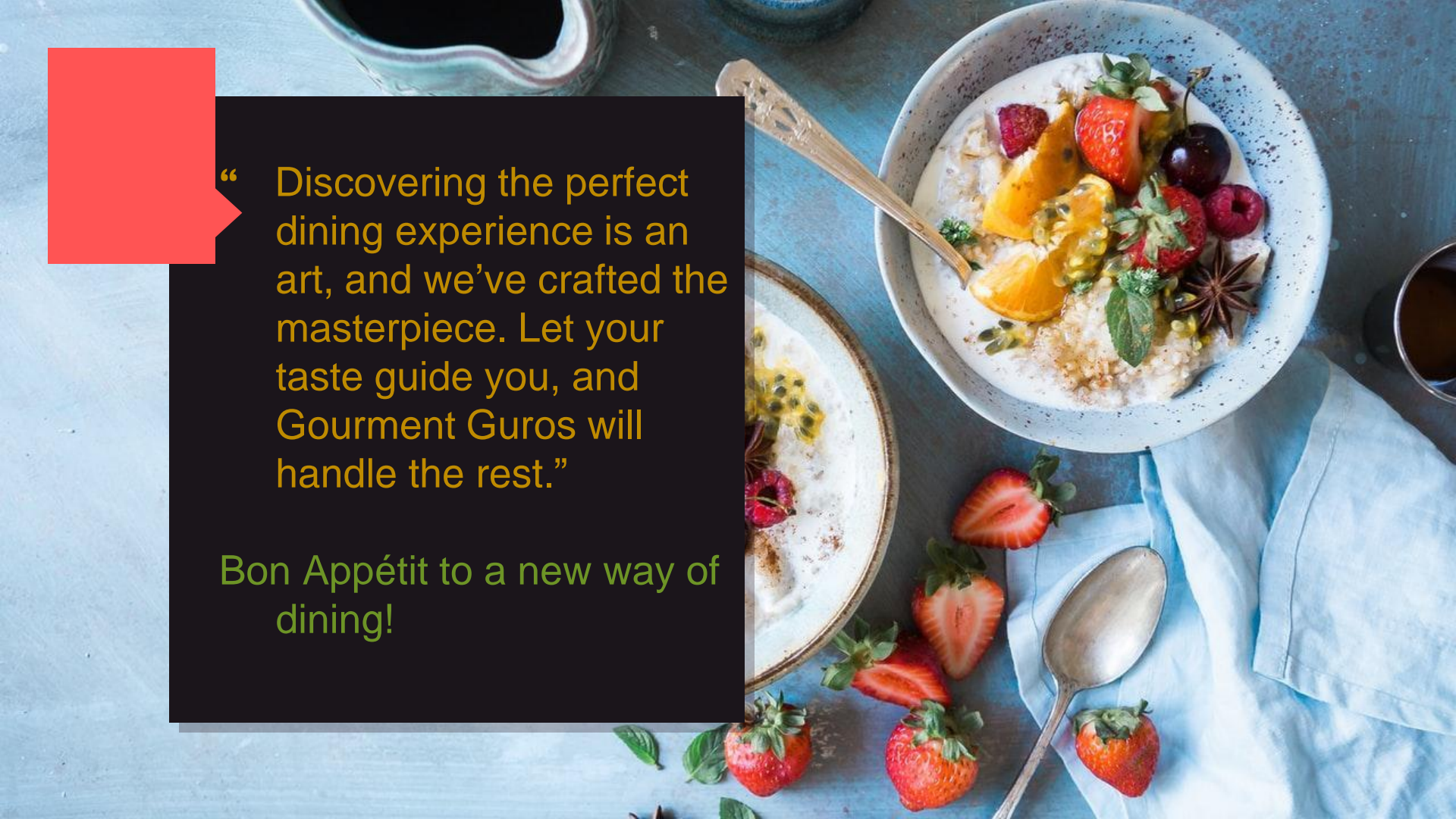




# FUTURE WORKS

- Expand coverage to more regions.
- Enhance user personalization features.
- Variability of Cuisine choices





“ Discovering the perfect dining experience is an art, and we’ve crafted the masterpiece. Let your taste guide you, and Gourment Guros will handle the rest.”

Bon Appétit to a new way of dining!

**Hmm**  
**yummy!!**

